

House Bill 4325 Testimony
Gregory L. Barkley, M.D.
Michigan House Health Policy Committee
March 1, 2005

Chairman Gaffney, Representative Mortimer, sponsor of House Bill, and members of the House Health Policy Committee, thank you for giving me the opportunity to speak to you today.

My name is Gregory L. Barkley, M.D. I am the President of the Michigan Neurological Association (MNA) and I am here as the representative of the neurologists of the State of Michigan who belong to the MNA. I am the Clinical Vice Chair of the Department of Neurology at Henry Ford Hospital and an Associate Professor of Neurology at Wayne State University. In addition to my clinical, teaching, and research duties as a neurologist specializing in epilepsy and clinical neurophysiology in the Henry Ford Health System, I am a member of the Henry Ford Hospital Board of Governors and I chair the Health Alliance Plan Ambulatory Pharmacy and Therapeutics Committee which chooses the medications used for care of patients with HAP insurance. I serve as a volunteer in a number of national organizations. I am a member of the Medical Economics and Management Subcommittee of the American Association of Neurology. I am a member of the Board of Directors of the American Epilepsy Society. I serve on the Board of Directors of the National Association of Epilepsy Centers where I am the Vice Chair and the Epilepsy Foundation where I am the Chair of the Professional Advisory Board. I am frequently asked to serve as reviewer of grant proposals for the NINDS branch of the National Institutes of Health (NIH).

I am here today to ask for your support in approving HB 4325. This bill is identical to HB 5078 of 2003 which passed in the Michigan House by a vote of 67-32 on November 30, 2004. The bill seeks to close a loophole in the Michigan Public Health Code that has been used by non-physicians to perform an invasive neurodiagnostic procedure called needle electromyography (needle EMG) and interpret a companion procedure called Nerve Conduction Studies (NCS). These are purely diagnostic procedures which are used to diagnose a wide variety of nerve and muscle disorders ranging from Carpal Tunnel Syndrome to Muscular Dystrophy and Lou Gehrig's Disease. Needle EMG studies are often used to plan surgery on pinched nerves in the neck and back. I am concerned that the current loophole puts patients at increased risk of misdiagnosis and exposes them to unnecessary costly and potentially harmful treatment. In addition, the current loophole is going to be exploited by out-of-state for profit companies to increase neurodiagnostic testing by employing physicians to countersign work done by physical therapists. HB 4325 will restrict the performance of needle EMG and interpretation of NCS to qualified physicians only.

Let me briefly describe how these procedures are done. The patient is referred by a physician with a request to evaluate a specific complaint such as weakness and numbness

in a limb. The patient is first met in the laboratory by the physician performing the study and a brief history and physical are performed to determine which nerves and muscles need to be tested. Several nerve conduction studies are performed first to establish the health of nerves in the involved area. NCS studies consist of using electrodes to give electric shocks along the path of the nerve to determine the speed and strength of the signal produced in the nerve by this stimulation. Most nerve conduction studies are mildly uncomfortable, but some, such as the repetitive stimulation studies used to diagnose Myasthenia Gravis (MG) are quite painful. The NCS may be performed by the physician or may be delegated to a trained technologist working directly with the physician. In both cases, the physician reviews the studies as they are being performed and then decides if additional nerves need to be studied depending upon the results of the initial studies.

Once the state of the nerves has been established, the condition of the muscles innervated by those nerves is assessed by needle EMG. This involves inserting a needle into 5 or more muscles in a limb, along the muscles on each side of the spine, or in certain circumstances, to muscles of the face and tongue, the muscles of the chest wall and diaphragm, the rectal sphincter, and even deep in the throat to larynx or voice box. Needle EMG studies range from moderately to very painful depending upon the muscle tested. The needle EMG study is also a dynamic test because, as each muscle is tested, a pattern of normality or abnormality is found and the physician must have knowledge of diseases of nerves and muscles and the complex "wiring diagram" of the nerves as they emerge from the brainstem and spinal cord and travel to the skin and muscles. Physicians routinely detect surprising findings in the course of the studies. Because of this, they frequently alter the nerves and muscles tested in the course of the tests from those that they predicted needed to be tested from the beginning of the study. From the responses to the NCS and needle EMG and the physician's knowledge of diseases of the nervous system, the physician makes a diagnosis and sends the report to the physician who ordered the test. The NCS and needle EMG tests are so complex, that only 6 neurologists and physiatrists out of the 20 in the Department of Neurology at Henry Ford Hospital are permitted to perform this study. None of the 1000 or so other physicians in the Henry Ford Medical Group have been credentialed to perform these tests.

The Neurology Resident program is a three year training program that follows four years of medical school and one year of internship in internal medicine. Training for needle EMG and NCS is given to all residents in Neurology at Henry Ford Hospital. Osteopathic Neurology residents from Garden City Osteopathic Hospital, Botsford Hospital, and St. John Oakland Hospital all receive 3 months supervised training at Henry Ford Hospital. This training consists of classroom instruction followed by practice of performing NCS on each other before performing NCS studies on patients. After about 1 month, the residents are allowed to begin closely supervised needle EMG studies on carefully selected patients under the direct supervision of one of the five credentialed EMG specialists. Neurology residents wishing to become proficient in EMG take an additional year of fellowship training which qualifies them to take the specialty board examination of the AANEM and the examination of Added Qualifications in Clinical Neurophysiology of the American Board of Psychiatry and Neurology.

As you can judge from my testimony, NCS and needle EMG are complicated diagnostic tests which should only be performed by trained physicians. I ask you to support HB 4325.

TO: The Honorable Michigan House Health Policy Committee

FROM: The American Academy of Neurology
&
The American Assoc. of Neuromuscular and Electrodiagnostic
Medicine

DATE: March 1, 2005

RE: House Bill 4325

UNDERSTANDING HOUSE BILL 4325

A. HISTORY OF HOUSE BILL 4325

- Sponsored by Representative Leslie Mortimer (R-Horton), House Bill 4325 was introduced on February 17, 2005, and referred to House Health Policy Committee (*See Attachment A*).
- HB 4325 IS IDENTICAL TO HB 5078 OF 2003, WHICH THE MICHIGAN HOUSE PASSED BY NOVEMBER 30, 2004, BY A VOTE OF 67-32 (*See Attachment B*).
- HB 4325 seeks to:
 - Augment Michiganders' health care by closing a loophole in the Michigan Public Health Code (*Public Act 368 of 1978*) that allows non-physicians to perform an invasive **diagnostic** medical procedure called Needle Electromyography (EMG) and interpret another called Nerve Conduction Studies (NCS).
 - Preserve limited health care resources at a time of state budgetary duress by compelling trained physicians to perform Needle EMG and interpret NCS.

B. CONTENTS OF HOUSE BILL 4325

HB 4325 seeks to amend the Michigan Public Health Code as follows:

- It defines, in Section 17001, "*Electrodiagnostic Studies*" as "*the testing of neuromuscular functions utilizing nerve conduction tests and needle electromyography. It does not include the use of surface electromyography.*"
- It adds two new sections, 17018 and 17518, that allow licensed physicians and podiatrists who have successfully completed additional training in the performance and interpretation of Electrodiagnostic Studies that is satisfactory to their respective boards to perform needle electromyography or interpret nerve conduction tests.
- It allows only those physical therapists who are certified by the American Board of Physical Therapy and who have been performing Electrodiagnostic Studies on a consistent basis within the 5 years immediately preceding the effective date of this act to perform Electrodiagnostic Studies.

C. RATIONALE BEHIND HOUSE BILL 4325

- Proponents of HB 4325 maintain that performance of Needle EMG and interpretation of NCS should be limited to qualified health-care providers – specifically, **physicians with additional training** on how to properly administer the tests and interpret results.
- Proponents of HB 4325 also assert that performance of Needle EMG and interpretation of NCS should be exclusive to physicians because **these are diagnostic tests**, and the Michigan Public Health Code only allows physicians to diagnose (*see Attachment C*). State licensing boards cannot circumvent Michigan law by promulgating rules to establish standards for their profession.

D. HOW OTHER STATES REGULATE NEEDLE EMG / NCS

- Most state medical boards – including those in the neighboring Great Lakes states of Illinois, Indiana, Ohio and Wisconsin – have opined that Needle EMG and NCS are the “Practice of Medicine.” (See Attachment D).
- Indeed, the State Medical Board of Ohio, in its April 14, 1994, Statement on Electromyography (See Attachment E) wrote:

“Differential **diagnoses** must be considered, and as abnormalities unfold or fail to unfold during the course of testing, the electromyographic procedure may be modified until a probable **diagnosis** is reached.

“**Results** of electromyographic examinations **are used for recommending surgical procedures**, and for determining the absence disease with most serious prognoses.

“In fact, there may exist no better example of an examination or diagnostic procedure fitting within the definition of the practice of medicine in Ohio.”

- Licensing boards in a few states have promulgated conflicting rules pertaining to Needle EMG / NCS. For example, the Alabama State Board of Medical Examiners, in September 1989, adopted a policy on EMG testing that stated, “Both the performance and interpretation of EMGs should be done by a physician and not a technician.” The Alabama Board of Physical Therapy issued a ruling in that same year that stated “EMG/NCV testing is within the scope of the practice of physical therapy in Alabama (See Attachment F).”

Similarly, the Texas Board of Medical Examiners considers Needle EMG the “Practice of Medicine.” But the Texas Board of Physical Therapy says Needle EMG is within the scope of practice of physical therapists. The Texas Attorney General has refused to address this conflict.

E. SHOULD A LEGISLATURE RESOLVE SUCH CONFLICTS?

It is wholly appropriate for a state Legislature to resolve such conflicts by clarifying the intent of the law. Case in point: The Michigan Legislature earlier this session amended the so-called Control Share Acquisition Act to clarify the rights of various classes of stockholders.

F. LOOPHOLE COMPROMISES PATIENT CARE, WASTES MONEY

Evidence abounds to suggest patient safety is compromised – and limited health-care resources, wasted – when non-physicians perform Needle EMG and NCS. Consider the following:

- A study (See Attachment G) by Dr. Tim Dillingham, professor and chair of the Medical College of Wisconsin, found that physical therapists were 550 percent more likely to misinterpret the results of a Needle EMG and misdiagnose diabetic polyneuropathy – “(resulting) in **unnecessary surgeries and other interventions**.” Dillingham added that, “This represents **substandard care with an inadequate recognition of this disabling condition**.”
- The Centers for Medicare and Medicaid Services, a division of the U.S. Department of Health and Human Services, in November 2003, unveiled its national Medicare improper payment survey for 2003 (See Attachment H).

The survey measures, among other things, **claims for procedures later deemed to be medically unnecessary**. It found an average error rate of 5.8 percent among health-care providers in their billings.

The providers with the most mistakes in their billings: Physical Therapists at 18.2 percent – an error rate more than three times the national average.

It's worth noting, too, that a Medicare Part B Carrier in California, in March 2000, issued a Medicare Bulletin 98-7 (*See Attachment I*), which states, in part, that, "*NCS and EMG interpretations typically include development of a differential diagnosis. Based on a physician's level of knowledge of disease ... only a physician may interpret such results properly.*"

"State law prohibits qualified physical therapists from developing diagnostic or prognostic interpretations of the data obtained (from Needle EMG and NCS). Therefore, physical therapists are not permitted to bill Medicare for the professional component of these tests."

- Payments for physical therapy made by Blue Cross/Blue Shield of Michigan – the state's largest health care insurer by far – increased nearly 100 percent in the five-year period from 1997 through 2001, **escalating from \$25.7 million to \$49 million** (*See Attachment J*).

More recent data were not readily available, but if physical therapy payments since 2001 increased at the same rate as they did from 1997 to 2001, Blue Cross/Blue Shield this year would pay more than \$80 million for such treatment.

- Members of the American Association of Electrodiagnostic Medicine (AAEM) and the American Academy of Neurology (AAN) have chronicled a plethora of Needle EMG misinterpretations by non-physicians (*See Attachment K*). As you will learn upon reading the myriad capsules and anecdotes, **non-physicians frequently missed red flags for such life-threatening diseases as Lou Gehrig's Disease and recommended patients undergo painful and unnecessary surgeries** for less serious maladies.

G. MICHIGAN HISTORY PERTAINING TO NEEDLE EMG and NCS

- The scope of practice debate in Michigan over performance of Needle EMG and interpretation of NCS began seriously percolating in 1986, when physical therapist John Palazzo sued – and won – a case in Wayne County (3rd) Circuit Court that he brought against the Michigan Neurological Association (MNA) and the Michigan Academy of Physical Medicine and Rehabilitation (MAPM&R).
- The jury ruled in the case that MNA's influencing a physician to stop referring patients to Palazzo for electromyography (EMG) tests violated Michigan anti-trust and consumer protection laws by tortuously interfering with his business enterprise.
- The court **did not rule**, however, that Michigan law affirms non-physicians' right to perform Needle EMGs and NCS.
- James Hughesian, MNA's attorney in the case, confirmed the latter in a recent telephone conversation.
- Indeed, in Palazzo's motion for injunctive relief – which, by the way, was denied by Wayne County Circuit Judge Susan Borman – his legal counsel acknowledged (on page 31) the lawsuit "*does not prohibit the Defendants from moving for legislative reform in the area of EMG testing* (*See Attachment L*)."

- Attorney Hughesian said the MNA and MAPM&R did not appeal the jury's decision in the Palazzo case because Dr. Robert Teasdall, former president of the MNA, died during or shortly after the case, dampening physician enthusiasm for the push to make Needle EMG and NCS the "Practice of Medicine." Additionally, MNA had few resources to finance such an appeal.
- The Michigan Legislature should intervene on this scope of practice issue and remove all ambiguity as to the intent of Michigan law pertaining to non-physicians performing Needle EMG and interpreting NCS.
- HB 4325 seeks to affirm that the performance of Needle EMG and interpretation of NCS are the "*Practice of Medicine*." **The legislation acknowledges, however, that the complexities of the medical procedures warrant their restriction to only properly trained physicians.**

ATTACHMENT A

House Bill 4325 *(As Introduced)*

HOUSE BILL No. 4325

February 17, 2005, Introduced by Reps. Mortimer, Gaffney and Hune and referred to the Committee on Health Policy.

A bill to amend 1978 PA 368, entitled
"Public health code,"
by amending sections 17001 and 17501 (MCL 333.17001 and 333.17501),
section 17001 as amended by 1990 PA 248 and section 17501 as
amended by 1990 PA 247, and by adding sections 17018 and 17518.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

- 1 Sec. 17001. (1) As used in this part:
- 2 (a) "Academic institution" means either of the following:
- 3 (i) A medical school approved by the board.
- 4 (ii) A hospital licensed under article 17 that meets all of the
- 5 following requirements:
- 6 (A) Was the sole sponsor or a co-sponsor, if each other co-

1 sponsor is either a medical school approved by the board or a
2 hospital owned by the federal government and directly operated by
3 the United States department of veterans' affairs, of not less than
4 4 postgraduate education residency programs approved by the board
5 under section 17031(1) for not less than the 3 years immediately
6 preceding the date of an application for a limited license under
7 section 16182(2)(c) or an application for a full license under
8 section 17031(2), provided that at least 1 of the residency
9 programs is in the specialty area of medical practice, or in a
10 specialty area that includes the subspecialty of medical practice,
11 in which the applicant for a limited license proposes to practice
12 or in which the applicant for a full license has practiced for the
13 hospital.

14 (B) Has spent not less than \$2,000,000.00 for medical
15 education during each of the 3 years immediately preceding the date
16 of an application for a limited license under section 16182(2)(c)
17 or an application for a full license under section 17031(2). As
18 used in this subparagraph, "medical education" means the education
19 of physicians and candidates for degrees or licenses to become
20 physicians, including, but not limited to, physician staff,
21 residents, interns, and medical students.

22 (B) "ELECTRODIAGNOSTIC STUDIES" MEANS THE TESTING OF
23 NEUROMUSCULAR FUNCTIONS UTILIZING NERVE CONDUCTION TESTS AND NEEDLE
24 ELECTROMYOGRAPHY. IT DOES NOT INCLUDE THE USE OF SURFACE
25 ELECTROMYOGRAPHY.

26 (C) ~~—(b)—~~ "Medical care services" means those services within
27 the scope of practice of physicians licensed by the board, except

1 those services that the board determines shall not be delegated by
2 a physician without endangering the health and safety of patients
3 as provided for in section 17048(3).

4 (D) ~~—(e)—~~ "Physician" means an individual licensed under this
5 article to engage in the practice of medicine.

6 (E) ~~—(d)—~~ "Practice of medicine" means the diagnosis,
7 treatment, prevention, cure, or relieving of a human disease,
8 ailment, defect, complaint, or other physical or mental condition,
9 by attendance, advice, device, diagnostic test, or other means, or
10 offering, undertaking, attempting to do, or holding oneself out as
11 able to do, any of these acts.

12 (F) ~~—(e)—~~ "Practice as a physician's assistant" means the
13 practice of medicine or osteopathic medicine and surgery performed
14 under the supervision of a physician or physicians licensed under
15 this part or part 175.

16 (G) ~~—(f)—~~ "Supervision" means that term as defined in section
17 16109, except that it also includes the existence of a
18 predetermined plan for emergency situations, including, but not
19 limited to, the designation of a physician to supervise a
20 physician's assistant in the absence of the primary supervising
21 physician.

22 (H) ~~—(g)—~~ "Task force" means the joint task force created in
23 sections 17025 and 17525.

24 (2) In addition to the definitions in this part, article 1
25 contains definitions and principles of construction applicable to
26 all articles in this code and part 161 contains definitions
27 applicable to this part.

1 SEC. 17018. (1) EXCEPT AS OTHERWISE PROVIDED UNDER THIS
2 SECTION, ONLY AN INDIVIDUAL WHO IS LICENSED AS A PHYSICIAN AND WHO
3 HAS SUCCESSFULLY COMPLETED ADDITIONAL TRAINING IN THE PERFORMANCE
4 AND INTERPRETATION OF ELECTRODIAGNOSTIC STUDIES THAT IS
5 SATISFACTORY TO THE BOARD SHALL PERFORM NEEDLE ELECTROMYOGRAPHY OR
6 INTERPRET NERVE CONDUCTION TESTS. A PHYSICIAN SHALL NOT DELEGATE
7 THE INTERPRETATION OF NERVE CONDUCTION TESTS TO ANOTHER INDIVIDUAL
8 UNLESS THAT INDIVIDUAL IS LICENSED UNDER THIS ARTICLE TO ENGAGE IN
9 THE PRACTICE OF MEDICINE OR OSTEOPATHIC MEDICINE AND SURGERY AND
10 HAS SUCCESSFULLY COMPLETED THE ADDITIONAL TRAINING AS DESCRIBED IN
11 THIS SUBSECTION. A PHYSICIAN SHALL NOT DELEGATE THE PERFORMANCE OF
12 NEEDLE ELECTROMYOGRAPHY TO ANOTHER INDIVIDUAL UNLESS THAT
13 INDIVIDUAL IS LICENSED UNDER THIS ARTICLE TO ENGAGE IN THE PRACTICE
14 OF MEDICINE OR OSTEOPATHIC MEDICINE AND SURGERY AND HAS
15 SUCCESSFULLY COMPLETED THE ADDITIONAL TRAINING AS DESCRIBED IN THIS
16 SUBSECTION OR THAT INDIVIDUAL IS OTHERWISE AUTHORIZED UNDER THIS
17 SECTION.

18 (2) IN ACCORDANCE WITH SECTION 16215, A PHYSICIAN MAY DELEGATE
19 THE PERFORMANCE OF NERVE CONDUCTION TESTS TO A LICENSED OR
20 UNLICENSED INDIVIDUAL WHO IS OTHERWISE QUALIFIED BY EDUCATION,
21 TRAINING, OR EXPERIENCE IF THOSE TESTS ARE CONDUCTED UNDER THE
22 DIRECT SUPERVISION OF A PHYSICIAN.

23 (3) A PHYSICAL THERAPIST WHO IS LICENSED UNDER THIS ARTICLE
24 AND CERTIFIED BY THE AMERICAN BOARD OF PHYSICAL THERAPY SPECIALTIES
25 AS AN ELECTROPHYSIOLOGIC CLINICAL SPECIALIST ON THE EFFECTIVE DATE
26 OF THIS SECTION MAY PERFORM ELECTRODIAGNOSTIC STUDIES THAT ARE TO
27 BE INTERPRETED BY A PHYSICIAN IF HE OR SHE HAS BEEN PERFORMING

1 ELECTRODIAGNOSTIC STUDIES IN THIS STATE ON A CONSISTENT BASIS
2 WITHIN THE 5 YEARS IMMEDIATELY PRECEDING THE EFFECTIVE DATE OF THIS
3 SECTION.

4 (4) A PODIATRIST WHO IS LICENSED UNDER THIS ARTICLE AND HAS
5 SUCCESSFULLY COMPLETED ADDITIONAL TRAINING IN THE PERFORMANCE AND
6 INTERPRETATION OF ELECTRODIAGNOSTIC STUDIES THAT IS SATISFACTORY TO
7 HIS OR HER RESPECTIVE BOARD MAY CONDUCT ELECTRODIAGNOSTIC STUDIES.

8 Sec. 17501. (1) As used in this part:

9 (A) "ELECTRODIAGNOSTIC STUDIES" MEANS THE TESTING OF
10 NEUROMUSCULAR FUNCTIONS UTILIZING NERVE CONDUCTION TESTS AND NEEDLE
11 ELECTROMYOGRAPHY. IT DOES NOT INCLUDE THE USE OF SURFACE
12 ELECTROMYOGRAPHY.

13 (B) ~~-(a)-~~ "Medical care services" means those services within
14 the scope of practice of physicians licensed and approved by the
15 board, except those services that the board determines shall not be
16 delegated by a physician without endangering the health and safety
17 of patients as provided for in section 17548(3).

18 (C) ~~-(b)-~~ "Physician" means an individual licensed under this
19 article to engage in the practice of osteopathic medicine and
20 surgery.

21 (D) ~~-(e)-~~ "Practice of osteopathic medicine and surgery"
22 means a separate, complete, and independent school of medicine and
23 surgery utilizing full methods of diagnosis and treatment in
24 physical and mental health and disease, including the prescription
25 and administration of drugs and biologicals, operative surgery,
26 obstetrics, radiological and other electromagnetic emissions, and
27 placing special emphasis on the interrelationship of the

1 musculoskeletal system to other body systems.

2 (E) ~~—(d)—~~ "Practice as a physician's assistant" means the
3 practice of osteopathic medicine performed under the supervision of
4 a physician licensed under this part or part 170.

5 (F) ~~—(e)—~~ "Supervision" has the meaning ascribed to it in
6 section 16109 except that it includes the existence of a
7 predetermined plan for emergency situations, including, but not
8 limited to, the designation of a physician to supervise a
9 physician's assistant in the absence of the primary supervising
10 physician.

11 (G) ~~—(f)—~~ "Task force" means the joint task force created in
12 sections 17025 and 17525.

13 (2) In addition to the definitions in this part, article 1
14 contains general definitions and principles of construction
15 applicable to all articles in the code and part 161 contains
16 definitions applicable to this part.

17 SEC. 17518. (1) EXCEPT AS OTHERWISE PROVIDED IN THIS SECTION,
18 ONLY AN INDIVIDUAL WHO IS LICENSED AS A PHYSICIAN AND WHO HAS
19 SUCCESSFULLY COMPLETED ADDITIONAL TRAINING IN THE PERFORMANCE AND
20 INTERPRETATION OF ELECTRODIAGNOSTIC STUDIES THAT IS SATISFACTORY TO
21 THE BOARD SHALL PERFORM NEEDLE ELECTROMYOGRAPHY OR INTERPRET NERVE
22 CONDUCTION TESTS. A PHYSICIAN SHALL NOT DELEGATE THE INTERPRETATION
23 OF NERVE CONDUCTION STUDIES TO ANOTHER INDIVIDUAL UNLESS THAT
24 INDIVIDUAL IS LICENSED UNDER THIS ARTICLE TO ENGAGE IN THE PRACTICE
25 OF MEDICINE OR OSTEOPATHIC MEDICINE AND SURGERY AND HAS
26 SUCCESSFULLY COMPLETED THE ADDITIONAL TRAINING AS DESCRIBED IN THIS
27 SUBSECTION. A PHYSICIAN SHALL NOT DELEGATE THE PERFORMANCE OF

1 NEEDLE ELECTROMYOGRAPHY TO ANOTHER INDIVIDUAL UNLESS THAT
2 INDIVIDUAL IS LICENSED UNDER THIS ARTICLE TO ENGAGE IN THE PRACTICE
3 OF MEDICINE OR OSTEOPATHIC MEDICINE AND SURGERY AND HAS
4 SUCCESSFULLY COMPLETED THE ADDITIONAL TRAINING AS DESCRIBED IN THIS
5 SUBSECTION OR THAT INDIVIDUAL IS OTHERWISE AUTHORIZED UNDER THIS
6 SECTION.

7 (2) IN ACCORDANCE WITH SECTION 16215, A PHYSICIAN MAY DELEGATE
8 THE PERFORMANCE OF NERVE CONDUCTION TESTS TO A LICENSED OR
9 UNLICENSED INDIVIDUAL WHO IS OTHERWISE QUALIFIED BY EDUCATION,
10 TRAINING, OR EXPERIENCE IF THOSE TESTS ARE CONDUCTED UNDER THE
11 DIRECT SUPERVISION OF A PHYSICIAN.

12 (3) A PHYSICAL THERAPIST WHO IS LICENSED UNDER THIS ARTICLE
13 AND CERTIFIED BY THE AMERICAN BOARD OF PHYSICAL THERAPY SPECIALTIES
14 AS AN ELECTROPHYSIOLOGIC CLINICAL SPECIALIST ON THE EFFECTIVE DATE
15 OF THIS SECTION MAY PERFORM ELECTRODIAGNOSTIC STUDIES THAT ARE TO
16 BE INTERPRETED BY A PHYSICIAN IF HE OR SHE HAS BEEN PERFORMING
17 ELECTRODIAGNOSTIC STUDIES IN THIS STATE ON A CONSISTENT BASIS
18 WITHIN THE 5 YEARS IMMEDIATELY PRECEDING THE EFFECTIVE DATE OF THIS
19 SECTION.

20 (4) A PODIATRIST WHO IS LICENSED UNDER THIS ARTICLE AND HAS
21 SUCCESSFULLY COMPLETED ADDITIONAL TRAINING IN THE PERFORMANCE AND
22 INTERPRETATION OF ELECTRODIAGNOSTIC STUDIES THAT IS SATISFACTORY TO
23 HIS OR HER RESPECTIVE BOARD MAY CONDUCT ELECTRODIAGNOSTIC STUDIES.

ATTACHMENT B

House Bill 5078
(As Passed House, November 30, 2004)

Roll Call No. 922**Yeas—100**

Accavitti	Farhat	Lipsey	Shaffer
Acciavatti	Farrah	McConico	Sheen
Adamini	Gaffney	Meisner	Sheltrown
Amos	Gielegghem	Meyer	Shulman
Anderson	Gillard	Middaugh	Smith
Bieda	Gleason	Milosch	Spade
Bisbee	Hager	Minore	Stakoe
Bradstreet	Hardman	Moolenaar	Stallworth
Brandenburg	Hood	Mortimer	Steil
Brown	Hoogendyk	Murphy	Stewart
Byrum	Hopgood	Newell	Tabor
Casperson	Howell	Nitz	Taub
Caswell	Huizenga	Nofs	Tobocman
Caul	Hummel	O'Neil	Vagnozzi
Cheeks	Hune	Palmer	Van Regenmorter
Clack	Jamnick	Palsrok	Vander Veen
Condino	Johnson, Rick	Pastor	Voorhees
Daniels	Johnson, Ruth	Plakas	Ward
Dennis	Julian	Pumford	Waters
DeRoche	Koetje	Richardville	Wenke
DeRossett	Kolb	Rivet	Whitmer
Dillon	Kooiman	Robertson	Wojno
Drolet	LaJoy	Rocca	Woodward
Ehardt	LaSata	Sak	Woronchak
Emmons	Law	Shackleton	Zelenko

Nays—0

In The Chair: Julian

The House agreed to the full title of the bill.

The bill was referred to the Clerk for enrollment printing and presentation to the Governor.

Rep. Palmer moved that Rep. Hager be excused temporarily from today's session.
The motion prevailed.

Rep. Waters moved that Rep. Clack be excused temporarily from today's session.
The motion prevailed.

Second Reading of Bills**House Bill No. 5078, entitled**

A bill to amend 1978 PA 368, entitled "Public health code," by amending sections 17001 and 17501 (MCL 333.17001 and 333.17501), section 17001 as amended by 1990 PA 248 and section 17501 as amended by 1990 PA 247, and by adding sections 17018 and 17518.

(The bill was read a second time, committee substitute (H-3) adopted, amended, amendments offered and bill postponed for the day on November 4, see House Journal No. 84, p. 2414; amendments offered and bill postponed temporarily on November 10, see House Journal No. 86, p. 2496.)

Rep. Vander Veen moved to amend the bill as follows:

1. Amend page 4, line 23, by striking out all of subsection (3) and renumbering the remaining subsection.
2. Amend page 5, line 4, after "podiatrist" by inserting a comma and "or a physical therapist,".
3. Amend page 7, line 15, by striking out all of subsection (3) and renumbering the remaining subsection.
4. Amend page 7, line 23, after "podiatrist" by inserting a comma and "or a physical therapist,".

The question being on the adoption of the amendments offered previously by Rep. Vander Veen,

The amendments were not adopted, a majority of the members serving not voting therefor, by yeas and nays, as follows:

Roll Call No. 923

Yeas—43

Accavitti	Emmons	Milosch	Stahl
Acciavatti	Garfield	Mortimer	Stakoe
Amos	Hoogendyk	Newell	Steil
Bisbee	Howell	Nitz	Tabor
Bradstreet	Huizenga	O'Neil	Vagnozzi
Casperson	Hummel	Palmer	Vander Veen
Caswell	Johnson, Rick	Pastor	Voorhees
Caul	Johnson, Ruth	Pumford	Walker
Dennis	Koetje	Shackleton	Wenke
Drolet	Kooiman	Shaffer	Woronchak
Ehardt	Middaugh	Sheen	

Nays—60

Adamini	Gaffney	Lipsey	Sheltrown
Anderson	Gielegghem	McConico	Shulman
Bieda	Gillard	Meisner	Smith
Brandenburg	Gleason	Meyer	Spade
Brown	Hardman	Minore	Stallworth
Byrum	Hood	Moolenaar	Stewart
Cheeks	Hopgood	Murphy	Taub
Condino	Hune	Nofs	Tobocman
Daniels	Hunter	Palsrok	Van Regenmorter
DeRoche	Jamnack	Plakas	Ward
DeRossett	Julian	Richardville	Waters
Dillon	Kolb	Rivet	Whitmer
Elkins	LaJoy	Robertson	Wojno
Farhat	LaSata	Rocca	Woodward
Farrah	Law	Sak	Zelenko

In The Chair: Julian

Rep. Hardman moved that the bill be placed on the order of Third Reading of Bills.
The motion prevailed.

Rep. Richardville moved that the bill be placed on its immediate passage.
The motion prevailed, a majority of the members serving voting therefor.

Rep. Waters moved that Rep. Sheltrown be excused temporarily from today's session.
The motion prevailed.

Rep. Palmer moved that Reps. Ehardt and Emmons be excused temporarily from today's session.
The motion prevailed.

By unanimous consent the House returned to the order of
Third Reading of Bills

House Bill No. 5078, entitled

A bill to amend 1978 PA 368, entitled "Public health code," by amending sections 17001 and 17501 (MCL 333.17001 and 333.17501), section 17001 as amended by 1990 PA 248 and section 17501 as amended by 1990 PA 247, and by adding sections 17018 and 17518.

Was read a third time and passed, a majority of the members serving voting therefor, by yeas and nays, as follows:

Roll Call No. 924

Yeas—67

Accavitti	Farrah	Lipsey	Shaffer
Adamini	Gaffney	McConico	Shulman
Amos	Gieleghem	Meisner	Spade
Anderson	Gillard	Meyer	Stallworth
Bieda	Gleason	Minore	Stewart
Brandenburg	Hardman	Moolenaar	Tabor
Brown	Hood	Murphy	Taub
Byrum	Hopgood	Newell	Tobocman
Casperson	Howell	Nitz	Walker
Cheeks	Hummel	Nofs	Ward
Condino	Hune	Palsrok	Waters
Daniels	Jamnick	Richardville	Wenke
Dennis	Johnson, Rick	Rivet	Whitmer
DeRossett	Julian	Robertson	Wojno
Dillon	Kolb	Rocca	Woodward
Elkins	LaSata	Sak	Zelenko
Farhat	Law	Shackleton	

Nays—32

Acciavatti	Hoogendyk	Milosch	Stahl
Bisbee	Huizenga	Mortimer	Stakoe
Bradstreet	Hunter	O'Neil	Steil
Caswell	Johnson, Ruth	Palmer	Vagnozzi
Caul	Koetje	Pastor	Van Regenmorter
DeRoche	Kooiman	Plakas	Vander Veen
Drolet	LaJoy	Pumford	Voorhees
Garfield	Middaugh	Sheen	Woronchak

In The Chair: Julian

The House agreed to the title of the bill.

Rep. Richardville moved that the bill be given immediate effect.

The motion prevailed, 2/3 of the members serving voting therefor.

Second Reading of Bills

Senate Bill No. 753, entitled

A bill to amend 1978 PA 368, entitled "Public health code," (MCL 333.1101 to 333.25211) by adding section 5474a; and to repeal acts and parts of acts.

SUBSTITUTE FOR
HOUSE BILL NO. 5078

A bill to amend 1978 PA 368, entitled
"Public health code,"
by amending sections 17001 and 17501 (MCL 333.17001 and
333.17501), section 17001 as amended by 1990 PA 248 and section
17501 as amended by 1990 PA 247, and by adding sections 17018 and
17518.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

- 1 Sec. 17001. (1) As used in this part:
- 2 (a) "Academic institution" means either of the following:
- 3 (i) A medical school approved by the board.
- 4 (ii) A hospital licensed under article 17 that meets all of
- 5 the following requirements:
- 6 (A) Was the sole sponsor or a co-sponsor, if each other
- 7 co-sponsor is either a medical school approved by the board or a
- 8 hospital owned by the federal government and directly operated by

1 the United States department of veterans' affairs, of not less
2 than 4 postgraduate education residency programs approved by the
3 board under section 17031(1) for not less than the 3 years
4 immediately preceding the date of an application for a limited
5 license under section 16182(2)(c) or an application for a full
6 license under section 17031(2), provided that at least 1 of the
7 residency programs is in the specialty area of medical practice,
8 or in a specialty area that includes the subspecialty of medical
9 practice, in which the applicant for a limited license proposes
10 to practice or in which the applicant for a full license has
11 practiced for the hospital.

12 (B) Has spent not less than \$2,000,000.00 for medical
13 education during each of the 3 years immediately preceding the
14 date of an application for a limited license under
15 section 16182(2)(c) or an application for a full license under
16 section 17031(2). As used in this subparagraph, "medical
17 education" means the education of physicians and candidates for
18 degrees or licenses to become physicians, including, but not
19 limited to, physician staff, residents, interns, and medical
20 students.

21 (b) "Electrodiagnostic studies" means the testing of
22 neuromuscular functions utilizing nerve conduction tests and
23 needle electromyography. It does not include the use of surface
24 electromyography.

25 (c) ~~—(b)—~~ "Medical care services" means those services within
26 the scope of practice of physicians licensed by the board, except
27 those services that the board determines shall not be delegated

1 by a physician without endangering the health and safety of
2 patients as provided for in section 17048(3).

3 (d) ~~—(e)—~~ "Physician" means an individual licensed under this
4 article to engage in the practice of medicine.

5 (e) ~~—(d)—~~ "Practice of medicine" means the diagnosis,
6 treatment, prevention, cure, or relieving of a human disease,
7 ailment, defect, complaint, or other physical or mental
8 condition, by attendance, advice, device, diagnostic test, or
9 other means, or offering, undertaking, attempting to do, or
10 holding oneself out as able to do, any of these acts.

11 (f) ~~—(e)—~~ "Practice as a physician's assistant" means the
12 practice of medicine or osteopathic medicine and surgery
13 performed under the supervision of a physician or physicians
14 licensed under this part or part 175.

15 (g) ~~—(f)—~~ "Supervision" means that term as defined in section
16 16109, except that it also includes the existence of a
17 predetermined plan for emergency situations, including, but not
18 limited to, the designation of a physician to supervise a
19 physician's assistant in the absence of the primary supervising
20 physician.

21 (h) ~~—(g)—~~ "Task force" means the joint task force created in
22 sections 17025 and 17525.

23 (2) In addition to the definitions in this part, article 1
24 contains definitions and principles of construction applicable to
25 all articles in this code and part 161 contains definitions
26 applicable to this part.

27 Sec. 17018. (1) Except as otherwise provided under this

1 section, only an individual who is licensed as a physician and
2 who has successfully completed additional training in the
3 performance and interpretation of electrodiagnostic studies that
4 is satisfactory to the board shall perform needle
5 electromyography or interpret nerve conduction tests. A
6 physician shall not delegate the interpretation of nerve
7 conduction tests to another individual unless that individual is
8 licensed under this article to engage in the practice of medicine
9 or osteopathic medicine and surgery and has successfully
10 completed the additional training as described in this
11 subsection. A physician shall not delegate the performance of
12 needle electromyography to another individual unless that
13 individual is licensed under this article to engage in the
14 practice of medicine or osteopathic medicine and surgery and has
15 successfully completed the additional training as described in
16 this subsection or that individual is otherwise authorized under
17 subsection (3).

18 (2) In accordance with section 16215, a physician may
19 delegate the performance of nerve conduction tests to a licensed
20 or unlicensed individual who is otherwise qualified by education,
21 training, or experience if those tests are conducted under the
22 direct supervision of a physician.

23 (3) A physical therapist who is licensed under this article
24 and certified by the American board of physical therapy
25 specialties as an electrophysiologic clinical specialist on the
26 effective date of this section may perform electrodiagnostic
27 studies that are to be interpreted by a physician if he or she

1 has been performing electrodiagnostic studies in this state on a
2 consistent basis within the 5 years immediately preceding the
3 effective date of this section.

4 (4) A podiatrist who is licensed under this article and has
5 successfully completed additional training in the performance and
6 interpretation of electrodiagnostic studies that is satisfactory
7 to his or her respective board may conduct electrodiagnostic
8 studies.

9 Sec. 17501. (1) As used in this part:

10 (a) "Electrodiagnostic studies" means the testing of
11 neuromuscular functions utilizing nerve conduction tests and
12 needle electromyography. It does not include the use of surface
13 electromyography.

14 (b) ~~—(a)—~~ "Medical care services" means those services within
15 the scope of practice of physicians licensed and approved by the
16 board, except those services that the board determines shall not
17 be delegated by a physician without endangering the health and
18 safety of patients as provided for in section 17548(3).

19 (c) ~~—(b)—~~ "Physician" means an individual licensed under this
20 article to engage in the practice of osteopathic medicine and
21 surgery.

22 (d) ~~—(e)—~~ "Practice of osteopathic medicine and surgery"
23 means a separate, complete, and independent school of medicine
24 and surgery utilizing full methods of diagnosis and treatment in
25 physical and mental health and disease, including the
26 prescription and administration of drugs and biologicals,
27 operative surgery, obstetrics, radiological and other

1 electromagnetic emissions, and placing special emphasis on the
2 interrelationship of the musculoskeletal system to other body
3 systems.

4 (e) ~~—(d)—~~ "Practice as a physician's assistant" means the
5 practice of osteopathic medicine performed under the supervision
6 of a physician licensed under this part or part 170.

7 (f) ~~—(e)—~~ "Supervision" has the meaning ascribed to it in
8 section 16109 except that it includes the existence of a
9 predetermined plan for emergency situations, including, but not
10 limited to, the designation of a physician to supervise a
11 physician's assistant in the absence of the primary supervising
12 physician.

13 (g) ~~—(f)—~~ "Task force" means the joint task force created in
14 sections 17025 and 17525.

15 (2) In addition to the definitions in this part, article 1
16 contains general definitions and principles of construction
17 applicable to all articles in the code and part 161 contains
18 definitions applicable to this part.

19 Sec. 17518. (1) Except as otherwise provided in this
20 section, only an individual who is licensed as a physician and
21 who has successfully completed additional training in the
22 performance and interpretation of electrodiagnostic studies that
23 is satisfactory to the board shall perform needle
24 electromyography or interpret nerve conduction tests. A
25 physician shall not delegate the interpretation of nerve
26 conduction studies to another individual unless that individual
27 is licensed under this article to engage in the practice of

1 medicine or osteopathic medicine and surgery and has successfully
2 completed the additional training as described in this
3 subsection. A physician shall not delegate the performance of
4 needle electromyography to another individual unless that
5 individual is licensed under this article to engage in the
6 practice of medicine or osteopathic medicine and surgery and has
7 successfully completed the additional training as described in
8 this subsection or that individual is otherwise authorized under
9 subsection (3).

10 (2) In accordance with section 16215, a physician may
11 delegate the performance of nerve conduction tests to a licensed
12 or unlicensed individual who is otherwise qualified by education,
13 training, or experience if those tests are conducted under the
14 direct supervision of a physician.

15 (3) A physical therapist who is licensed under this article
16 and certified by the American board of physical therapy
17 specialties as an electrophysiologic clinical specialist on the
18 effective date of this section may perform electrodiagnostic
19 studies that are to be interpreted by a physician if he or she
20 has been performing electrodiagnostic studies in this state on a
21 consistent basis within the 5 years immediately preceding the
22 effective date of this section.

23 (4) A podiatrist who is licensed under this article and has
24 successfully completed additional training in the performance and
25 interpretation of electrodiagnostic studies that is satisfactory
26 to his or her respective board may conduct electrodiagnostic
27 studies.

ATTACHMENT C

**“PHYSICIAN”
&
“PRACTICE OF MEDICINE”**

As Defined in Michigan Public Health Code

PUBLIC HEALTH CODE (EXCERPT)
Act 368 of 1978

PART 170
MEDICINE

333.17001 Definitions; principles of construction.

Sec. 17001. (1) As used in this part:

(a) "Academic institution" means either of the following:

(i) A medical school approved by the board.

(ii) A hospital licensed under article 17 that meets all of the following requirements:

(A) Was the sole sponsor or a co-sponsor, if each other co-sponsor is either a medical school approved by the board or a hospital owned by the federal government and directly operated by the United States department of veterans' affairs, of not less than 4 postgraduate education residency programs approved by the board under section 17031(1) for not less than the 3 years immediately preceding the date of an application for a limited license under section 16182(2)(c) or an application for a full license under section 17031(2), provided that at least 1 of the residency programs is in the specialty area of medical practice, or in a specialty area that includes the subspecialty of medical practice, in which the applicant for a limited license proposes to practice or in which the applicant for a full license has practiced for the hospital.

(B) Has spent not less than \$2,000,000.00 for medical education during each of the 3 years immediately preceding the date of an application for a limited license under section 16182(2)(c) or an application for a full license under section 17031(2). As used in this subparagraph, "medical education" means the education of physicians and candidates for degrees or licenses to become physicians, including, but not limited to, physician staff, residents, interns, and medical students.

(b) "Medical care services" means those services within the scope of practice of physicians licensed by the board, except those services that the board determines shall not be delegated by a physician without endangering the health and safety of patients as provided for in section 17048(3).

(c) "Physician" means an individual licensed under this article to engage in the practice of medicine.

(d) "Practice of medicine" means the diagnosis, treatment, prevention, cure, or relieving of a human disease, ailment, defect, complaint, or other physical or mental condition, by attendance, advice, device, diagnostic test, or other means, or offering, undertaking, attempting to do, or holding oneself out as able to do, any of these acts.

(e) "Practice as a physician's assistant" means the practice of medicine or osteopathic medicine and surgery performed under the supervision of a physician or physicians licensed under this part or part 175.

(f) "Supervision" means that term as defined in section 16109, except that it also includes the existence of a predetermined plan for emergency situations, including, but not limited to, the designation of a physician to supervise a physician's assistant in the absence of the primary supervising physician.

(g) "Task force" means the joint task force created in sections 17025 and 17525.

(2) In addition to the definitions in this part, article 1 contains definitions and principles of construction applicable to all articles in this code and part 161 contains definitions applicable to this part.

History: 1978, Act 368, Eff. Sept. 30, 1978;—Am. 1990, Act 247, Imd. Eff. Oct. 12, 1990;—Am. 1990, Act 248, Imd. Eff. Oct. 12, 1990.

Compiler's note: For transfer of powers and duties of certain health-related functions, boards, and commissions from the Department of Licensing and Regulation to the Department of Commerce, see E.R.O. No. 1991-9, compiled at § 338.3501 of the Michigan Compiled Laws.

Popular name: Act 368

333.17008 Physician's assistant; health profession subfield.

Sec. 17008. Practice as a physician's assistant is a health profession subfield of the practice of medicine and osteopathic medicine and surgery.

History: 1978, Act 368, Eff. Sept. 30, 1978.

Popular name: Act 368

333.17011 License or authorization required; granting license to individuals meeting certain requirements; prohibition.

Sec. 17011. (1) An individual shall not engage in the practice of medicine or practice as a physician's assistant

ATTACHMENT D

**HOW OTHER STATES REGULATE
PERFORMANCE OF NEEDLE EMG**

and

INTERPRETATION OF NERVE CONDUCTION STUDIES

ITEMS OF NOTE IN THE STATE FILE FOLDERS

(Black file cabinets, Professional Practice file, orange file folders)

Alabama

- 1999 Copy of Physical Therapy Practice Act defining physical therapy as "the treatment of a human being by the use of exercise, massage, heat, cold, water, radiant energy, electricity or sound for the purpose of correcting or alleviating any physical or mental condition or preventing the development of any physical or mental disability, or the performance of neuromuscular-skeletal tests and measurements to determine the existence and extent of body malfunction; provided that physical therapy shall be practiced only upon the referral of a physician licensed to practice medicine or surgery and a dentist licensed to practice dentistry and shall not include radiology or electrosurgery."
- 1998 Opinion from Board of Medical Examiners: Performance and interpretation of EMG tests should be done by a physician and not a technician, whether in a hospital or office setting.
- 1998 February 26, 1998 article from Alabama MD regarding BCBS review of EMG/NCS. They decided not to reimburse for neurometer sensory testing.
- 1997 AAEM communications with Workers' Compensation regarding their inappropriate use of modifier -51 in conjunction with NCS codes; includes AMA letter saying this use of the modifier is inappropriate.
- 1993 Licensure information for physical therapists saying they can perform "neuromuscular skeletal tests & measurements, including use of electricity, if done on referral of a licensed physician or dentist.

Alaska

- 2000 The Alaska State Board of Medical Examiners will discuss rendering an opinion regarding needle EMG as the practice of medicine in late April and advise the AAEM of its conclusions. In the past, the Board has not rendered opinions regarding certain practices or the use of devices.
- 1993 Liaison's letters to Medical Board asking for position regarding performance of EMG; no response ever received.

Arizona

- 2000 Arizona Board of Medical Examiners: clinical diagnostic EMG is considered the practice of medicine; needle EMG should be performed only by physicians. Surface EMG could be performed by a properly trained technician.
- 1980 Letter from Board of Medical Examiners: Clinical diagnostic EMG performed by a nonphysician would be considered the practice of medicine and violate the state's medical practice acts.

Arkansas

- 1994 Opinion from Board of Medical Examiners reiterating 1993 opinion: EMG and NCS must be considered an invasive procedure and should not be done by a physical therapist, but should be performed by a physician or someone under the direct supervision of the physician. EMG performed by a nonphysician would be considered the practice of medicine.
- 1993 Medicare policy stating that physical therapists are allowed to do EMG/NCS, based on a HCFA policy that such procedures performed by physical therapists will be reimbursed provided the tests are within the scope of their state licensure.

California

- 2000 CMA Letter to Dr. Jablecki regarding EDX and PTs.
- 1980 Opinion from Board of Medical Quality Assurance: Laws recently changed to allow licensed physical therapists to perform EMG without direct physician supervision. However, EMGs must be done at order of a physician and physical therapists cannot use their findings to independently develop a diagnosis or treatment plan. The Board certifies physical therapist electromyographers.
- 1998 December Local Medical Review Policy for Northern California. Is based on the AAEM's *Recommended Policy*. Also some correspondence between AAEM and Medicare Medical Director regarding the establishment of policy.
- 1996 Correspondence between Dr. Jablecki and Trans Occidental Life Insurance regarding review of their NCS policy. Some changes were made to the policy.

- 1993 Laws and regulations relating to the practice of physical therapists.

Colorado

- 2000 Letter from Colorado Board of Medical Examiners: interpretation of needle and surface EMG exams does constitute the practice of medicine. A physician may train others to insert needles for purposes of a needle EMG exam. The physician, however, is responsible for supervising any person to whom he delegates medical tasks and the physician is responsible for that person's actions relative to the practice of medicine.
- 1997 State law/physical therapy act: Physical therapists can perform tests of muscle strength, reflexes, automatic reactions, and peripheral nerve integrity, but can not use electricity for surgery, lifesaving measures, or diagnosis of disease.
- 1995 Opinion from Board of Medical Examiners: Physicians can delegate EMG/NCS to employees provided the physician provides necessary supervision. The Board cannot limit what physicians can do, or license physicians by specialty.

Connecticut

- 2000 Letter from Department of Public Health, advising that their position regarding EMG (see 1993 letter) is unchanged.
- 1993 Letter from Department of Health Services/Division Medical Quality Assurance: EMG is within the scope of practice of medicine and can only be practiced by licensed physician, or by a physician assistant or licensed nurse under "supervision, control, and responsibility" of licensed medical doctor or podiatrist.

Delaware

- 2000 Letter from Delaware Division of Professional Regulation: Board of Medical Practice does not issue advisory opinions.
- 1984 Letter from the Department of Justice/Deputy Attorney General: Board of Medical Practice says physical therapists trained in administering EMGs can do so and issue a report of the findings. They can also report NCSs in numerical values, stating that those values indicate a decrease/loss of nerve conduction in areas reported on. Physical therapists cannot state/report that such a decrease/loss indicates a particular ailment or disease; such a diagnosis would be the practice of medicine.

Florida

- 2000 Letter from Florida Board of Medicine: our request for updated information was received too late to be discussed at the Board's April meeting. It will be discussed in June and we will be provided with more information then.
- 1980 Letter from Board of Medical Examiners: Licensed physical therapist can perform EMG on request of a physician. The physician does not have to be physically present. Physical therapist cannot perform EMG without the request of a physician.
- 1993 Letter from Medicare Part B: Advises recent policy change to reimburse for EMGs performed by physical therapists was the result of a national policy. HCFA notified all Medicare Carriers that they could reimburse for these tests as long as the performance of EMGs by physical therapists was not inconsistent with state laws.
- 1993 Letter from Florida Medical Association thanking the AAEM for help in defeating legislation that would allow physical therapists to perform EMG/NCS. (Doesn't this conflict with the items above?) Also correspondence regarding this matter and copy of a Bill that died in committee.

Georgia

- 2000 Letter from Composite State Board of Medical Examiners: Board declines to issue a policy statement on this issue. Provided Title 43, which defines practice of medicine. Nothing on point, but acupuncture and use of TENS are both considered practice of medicine.
- 1980 Opinion from Composite Board of Medical Examiners: EMG/NCS can only be performed by or under the supervision of a physician, or upon physician request.
- 1997 Letter from Medical Association of Georgia: they support the AAEM's position regarding performance of EMG/NCS, but would pass our request for information on tot he Composite Board of Medical Examiners.

Hawaii

- 2000 Letter from Board of Medical Examiners: In the Board's informal opinion, needle and surface

EMG are within the scope of practice of medicine and may be performed by physicians. However, the Board has no jurisdiction over whether other professions may practice EMG – each profession's own licensing Board would need to make that decision.

- 1995 Informal opinion of Board of Medical Examiners: There is no distinction made between EMG/NCS. They believe the performance of either test would be considered the practice of medicine.
- 1996 Letter from Board of Medical Examiners: May want to purchase set of laws and rules regulating medicine so that we can determine whether EMG/NCS would be within the scope of medicine and therefore limited only to licensed physicians (unless other persons are allowed to perform them through their licensing laws).

Idaho

- 2000 Letter from State Board of Medicine: At its 4/10/95 meeting, the Physical Therapy Advisory Committee to the Board of Medicine determined "that it is within the scope of practice for a registered physical therapist to perform and interpret the findings from an EMG study." The minutes of the June 1, 1996, Board of Medicine meeting further clarifies this issue: The Board approved a motion that it is within the scope of practice for a physical therapist to provide a written interpretation of the findings from nerve conduction studies and that written interpretations that identify specific medical diagnoses or that relate findings to a specific medical diagnoses are beyond the authorized scope of practice for a physical therapist."
- 1996 Letter from State Board of Medicine: Physical therapists can perform NCS/EMG and interpret findings. They cannot write an interpretation or summary that identifies medical diagnosis or relates the findings to a specific medical diagnosis.

Illinois

- 1993 Letter from Department of Professional Regulation: EMG appears to fall under the definition of practice of medicine.

Indiana

- 1997 Opinion from Health Professions Bureau: EMG is the practice of medicine; only those licensed to practice medicine may perform it.
- 1997 Medicare Policy & AAEM response.
- 1994 Correspondence regarding Medicare Policies and AAEM comments from 1994 to 1998. This became the precursor to the AAEM's Recommended Policy.

Iowa

- 2000 Letter from Board of Medical Examiners: needle EMG remains within the scope of medical practice and, as such, may only be performed by licensed physicians, qualified personnel working under the direct supervision of a licensed physician, or authorized physician assistant.
- 1993 Letter from the Board of Medical Examiners: EMG may be performed by licensed physicians, qualified personnel under the direct supervision of a licensed physician, or authorized physician's assistants.

Kansas

- 1997 Opinion from Board of Healing Arts: EMG is the practice of medicine/surgery.

Kentucky

- 2000 Letter from Kentucky Board of Medical Licensure: Just provided excerpts from the statutes, no opinion. Although needle EMG is not mentioned, it does appear to fall within the scope of physical therapy.
- 1993 Physical therapy act: physical therapists can do EMG/NCS.
- 1980 Letter from Department of Human Resources: No specific law relating to practice of EMG. However, it may very well fall within the practice of medicine.

Louisiana

- 2000 Letter from Louisiana State Board of Medical Examiners: Reaffirmed its prior expression . . . "electromyography is not and cannot be considered a mechanical function but, rather, an interactive procedure in which the electromyographer is called upon to make continuing adjustments based on medical inferences drawn from and judgements made on ongoing

results. Thus, in the Board's view, the procedure itself – and not simply the interpretation of resulting recorded data – demands the ongoing application of direct and immediate medical judgement, which constitutes the practice of medicine and which may only be performed by a licensed physician." NCS may be performed by a properly educated and trained physical therapist under the supervision of a physician.

- 1980 Statement of position from Board of Medical Examiners: Licensed, trained physical therapists can perform NCSs on referral and under supervision of a physician, provided the interpretation of results is done by a physician. Only licensed physicians can perform EMG.

Maine

- 1993 Opinion from Board of Registration: Only physicians are doing needle EMGs, but nothing in Maine statutes specifies that only a physician can conduct those procedures. There is no licensing entity for these procedures for the occupation of electrodiagnostic technician. Registered physical therapists can and do include EMG within their lawful scope of practice. Licensed chiropractors use a different type of EMG in their scope of practice. The Board believes that technicians can do EMG as long as a physician orders and supervises the tests and interprets the results. Physician does not need to be physically present during the EMG, but should be immediately available to intervene medically in the event of a problem.

Maryland

- 1997 Opinion from Board of Physician Quality Assurance: Board of Physical Therapist Examiners concluded that EMG is within the scope of practice of physical therapy. The Practice of Medicine Committee reviewed this conclusion and agreed with the physical therapists; they did not make a distinction between needle EMG and NCS.
- 1996 Correspondence with Medicare Medical Director regarding proposed intraoperative neurophysiological testing policy.
- 1992 House Bill including needle EMG/NCS as the practice of medicine was withdrawn due to unfavorable committee report.

Massachusetts

- 1980 Opinion from Division of Registration/Board of Registration and Discipline in Medicine: Physicians may delegate anything to a qualified person.
- 1989 Regulations regarding physical therapy: Physical therapy practice is evaluation, treatment, and instruction related to neuromuscular, musculoskeletal, cardiovascular, and respiratory functions. Such evaluation includes, but is not limited to, performance and interpretation of tests as an aid to the diagnosis. An aid to diagnosis means the submission of data, opinions, and interpretations of tests and measurements to a physician for his use in defining a medical diagnosis.

Michigan

- 1997 Letter from the State of Michigan Health Licensing Division: letter providing Public Health Codes for physicians and physical therapists. The practice of physical therapy means evaluation of an individual by employment of physical measures, including the performance of tests and measurements. Physical measures include electricity. The practice of physical therapy does not include the identification of underlying medical problems or etiologies, establishment of medical diagnoses, or prescribing of treatment.

Minnesota

- 1998 Neither the Attorney General nor the Board of Medical Practice would provide a legal opinion/position on whether EMG is the practice of medicine. They provided copies of the Minnesota statutes regarding the unlicensed practice of medicine.
- 1997 Draft of Local Medical Review Model Policy, and comments provided by the AAEM, AAPM&R, AAN, and Karen Ryan.
- 1993 Medicare newsletter regarding reimbursement now provided for physical therapists doing EMGs.
- 1980 Physical therapy act.
- 1976 Letter from Board of Medical Examiners: EMG is the practice of medicine.

Mississippi

- 2000 Letter from Mississippi State Board of Medical Licensure: The practice of electromyography is considered the practice of medicine and may be performed only by a licensed physician or under the direct supervision of a licensed physician.
- 1981 Opinion from State Board of Medical Licensure: The practice of EMG is the practice of medicine and is to be performed by or under the direct supervision of a licensed physician.

Missouri

- 2000 Letter from Missouri State Board of Registration for the Healing Arts: The Board regards the practice of needle electromyography to constitute the practice of medicine in the State of Missouri.
- 1986 District Court allows physical therapists to perform EMG and NCS.

Montana

- 2000 Letter from Board of Medical Examiners: Montana's statute still defines the "practice of medicine" to include "the diagnosis, . . . or the attempt to or the holding oneself out as being able to diagnose, . . . human conditions, ailments, diseases, injuries, or infirmities, . . . by any means methods, devices, or instrumentalities." [37-3-102 (6), Montana Code Annotated.] Thus the use of electromyography as a diagnostic tool should be considered the practice of medicine, and the only statutory exemption available is "the rendering of services by a physical therapist, technician, or other paramedical specialist under the appropriate amount and type of supervision of a person licensed under the laws of this state to practice medicine." [37-3-103 (1) (I), Montana Code Annotated.]
- 1980 Opinion from the Department of Professional Occupational Licensing: EMG is the practice of medicine and should be performed by a physician or a physical therapist or technician under the personal responsibility, direction, and supervision of a physician.

Nebraska

- 1985 Opinion of Bureau of Examining Boards, Board of Examiners in Medicine & Surgery: EMG performed independently by nonphysicians without direct supervision would be considered the practice of medicine and a violation of the Medical Practice Act.

Nevada

- 2000 Letter from the State Board of Medical Examiners: confirmed that it is still the Board's position that EMG performed by nonphysicians not under the direct supervision and responsibility of a qualified licensed physician would be the practice of medicine.
- 1980 Opinion from the State Board of Medical Examiners: EMG performed by a nonphysician not under direct supervision and responsibility of a qualified licensed physician would be the practice of medicine, particularly if the EMG was also interpreted by a nonphysician, and in violation of the Medical Practice Act.

New Hampshire

- 2000 Letter from the Board of Medicine: Needle EMG must be done by a physician; surface EMG must be done under the supervision of a physician.
- 1980 Letter from the Board of Registration in Medicine: EMG performed by a nonphysician would be the practice of medicine and violate the Medical Practice Act.

New Jersey

- 1997 Opinion from the Board of Medical Examiners: Invasive procedures can only be performed by physicians. The Board of Physical Therapy recently considered having physical therapists perform EMG/NCS, but the position was rejected on the advice of the Board of Medical Examiners. Includes a copy of the Board's policies regarding EMG testing by physical therapists and chiropractors.
- 1986 Materials going back to the 1970's regarding this issue.

New Mexico

- 1984 Letter from the Board of Medical Examiners' Secretary-Treasurer: He believes EMG is the practice of medicine and should not be done by therapists or nonphysicians. Also believes it would be appropriate for trained technicians to perform EMG under a physician's guidance/supervision, but physicians should interpret the results.

New York

- 2000 CAC Draft 6/7/2000. New York State Medicare Local Medical Review Policy
- 1997 Opinion from the State Education Department: Physical therapists can perform and interpret EMG/NCS on referral from a licensed physician, dentist, podiatrist, or nurse practitioner. Prescribing practitioner would interpret results and prescribe treatment.
- 1994 Medicare Policy on NCS.

North Carolina

- 2000 Letter from the North Carolina Medical Board: Would not issue an opinion, but directed us to their Web site (www.docboard.org/nc) for statutes and position statements. Nothing on point was found.
- 1995 Letter from the Board of Medical Examiners: Physical therapists can perform EMG/NCS and make physical therapy interpretations, but not medical diagnoses, based on the results.

North Dakota

- 2000 Letter from North Dakota State Board of Medical Examiners reiterating the position stated in 1993.
- 1993 Opinion from State Board of Medical Examiners: EMG is an invasive procedure and thus is the practice of medicine. Performance of this diagnostic test should be done by physicians or under the immediate supervision of a physician.
- 1980 Physical therapy laws.

Ohio

- 1994 State of Medical Board Policy Statement: EMG is the practice of medicine and cannot be delegated to nonphysicians. NCS can be performed by nonphysicians and results recorded, but the nonphysician must be under physician supervision and results may only be interpreted into a diagnosis by a specifically trained physician. (Statement originated in 1990; was revised in 1994.)
- 1997 Medicare Guideline for NCVs.
- 1994 Medicare Policies.

Oklahoma

- 2000 Letter from the Oklahoma Board of Medical Licensure & Supervision: Needle EMG would appear to be considered the practice of medicine in the same way other laboratory tests, EEG, ECG, and Radiography procedures are defined.
- 1981 Opinion of the Board of Medical Examiners: Performance of EMG by a nonphysician would not be considered the practice of medicine as long as no diagnosis was made nor treatment program entered as a result of the tests.

Oregon

- 1997 Opinion from Board of Medical Examiners: The Board does not license physical therapists, but the Physical Therapy Licensing Board Considers EMG to be within the scope of practice of a licensed physical therapist so long as they obtain an education consistent with guidelines such as those drafted by the APTA and AAEM.. It would require a statute change to exclude physical therapists from doing EMG.

Pennsylvania

- 1981 Letter from the Board of Medical Education & Licensure: EMG examination can only be administered pursuant to the request of a qualified physician. The physician is to perform the physical and neurological examinations and take a medical history prior to authorizing the performance of the test. No level of supervision is regulated. Diagnosis of test results and prescription of medical therapeutic and corrective measures would constitute the practice of medicine.
- 1998 Medicare Policy for NCV; based on the AAEM's recommendations.
- 1975 Physical therapy act.

Puerto Rico

- 1996 Medicare Policy on NCS; based on AAEM's recommendations.

Rhode Island

- 1980 Letter from Department of Health/Division of Professional Regulations: EMG is not considered the practice of medicine.

South Carolina

- 1997 Letter from the Attorney General: EMG appears to be the practice of medicine based on the South Carolina Medical Practice Act (copy provided), but the Attorney General will not issue an opinion.
- 1987 Letter from the Attorney General saying EMG appears to be the practice of medicine.
- 1984 Medicare Review Policy.

South Dakota

- 1997 Opinion from the Board of Medical and Osteopathic Examiners: EMG falls within the scope of practice of physical therapy.
- 1980 Laws regarding the licensing of doctors of medicine and osteopathy.

Tennessee

- 2000 Letter from the Tennessee Department of Health Related Boards: there have been no departures from the Board's original position (see 1995 statement); it continues to stand.
- 1995 Opinion from the Board of Medical Examiners: EMG is the practice of medicine and can only be performed by a licensed physician.

Texas

- 1997 Letter from the Attorney General: The Board of Medical Examiners says needle EMG constitutes the practice of medicine and is within the scope of practice of licensed physicians. The Board of Physical Therapy Examiners says EMG is within the scope of practice of licensed physical therapists. The Attorney General refused to address this conflict and says each Board can regulate its own members.
- 1998 Rob Portman's (AAEM attorney) response to the 1997 Attorney General opinion, on behalf of AAEM, AAN, and AAPM&R.
- 1996 A lot of material from the fight to get a law making EMG the practice of medicine; includes legal briefs, etc.
- 1996 Policy from the Texas Medical Association: EMG should be performed licensed physicians.

Utah

- 2000 Letter from Division of Occupational and Professional Licensing: Because the needle EMG process requires medical judgement for interpretation, it would constitute the practice of medicine. Do not have enough information regarding surface EMG to render an opinion.
- 1980 Letter from the Physicians Licensing Board: The Board feels that because of the EMG process requiring medical judgment for interpretation, EMG performed by a nonphysician not under the director supervision of a qualified, licensed physician would be the practice of medicine and, in all probability would violate the Medical Practice Act.
- 1995 Medicare Guidelines on EMG: EMG examination on industrially injured patients in Utah should be accomplished by physicians. NCSs should be done by a qualified technician working directly under supervision of a physician.

Vermont

- 1980 Letter from the Board of Medical Practice: Technicians can perform EMG only under direct supervision of a physician.

Virginia

- 2000 Letter from the Executive Director of the Board of Medicine: Physical therapists recently achieved separate Board status and, once new legislation is signed by the Governor and implementation begins, physical therapists will no longer be regulated by the Board of Medicine. Also, the following amendments were added in 1998: Section 54.1-2900, Definition of Physical therapy, was amended by adding "Any use of electromyographic procedures by a physical therapist shall be consistent with the provisions of Section 54.1-2943; Section 54.1-2943 was amended by adding "No physical therapist may conduct electromyography procedures until the Board has approved a practice protocol which specifies direction and supervision by a licensed

doctor of medicine or osteopathy and sets forth the manner in which the physical therapist will implement electromyography procedures of evaluation of patients and clients, which shall include, but is not limited to, a requirement for collaboration by the physical therapist with a licensed doctor of medicine or osteopathy has been approved by the Board of Medicine."

- 1985 Letter from the Attorney General: Needle EMG is the practice of medicine and can only be performed by a physician. NCS can be performed by a technician under supervision.
- 1998 Correspondence regarding the Virginia Board of Medicine Task Force Subcommittee of Criteria for Performance of EMG.
- 1995 Medicare Policy on EMG, NCS, SEP.

Washington

- 2000 Letter from the Executive Director, Department of Health. There have been no changes to the Medical Practice Act [RCW 18.71.011(3)] since 1995; severing or penetrating the tissues of human beings is still the practice of medicine. The Medical Quality Assurance Commission continues to maintain the position that needle EMG is the practice of medicine.
- 1995 Letter from the Department of Health Medical Quality Assurance Commission: Needle EMG would be the practice of medicine because it meets the definition stated in RCW18.71.01(3) "the severing or penetration of human tissue is the practice of medicine."
- 1995 Proposed Medicare Policies on biofeedback and botulinum toxin, as well as responses from the AAEM.
- 1993 BCBS notice of reduction in NCS reimbursement and AAEM response.

West Virginia

- 2000 Letter from the Executive Director, West Virginia Board of Medicine. No change in the Board's 1993 position regarding electrodiagnostic medicine. No distinction is made between needle EMG and surface EMG.
- 1993 Opinion from the Board of Medicine: EMG within the purview of the practice of medicine and must be performed by a licensed physician.

Wisconsin

- 1981 Declaratory Ruling from the Medical Examining Board: Needle EMG constitutes the practice of medicine and surgery, as it requires penetration, piercing, or severing of tissues of the human body.
- 2000 Letter from Dept. of Regulation & Licensing dated 7/31 stating that Physical Therapists have their own credentialing board. The Medical Examining Board has not licensed Physical Therapists since 1982. The MEB takes no position on Surface EMGs.

Wyoming

- 1997 Board of Physical Therapy/Medical Practice Act: Physicians can delegate responsibilities to a person who is qualified by training, experience, or licensure.
- 1995 Letter from the Board of Medicine/Medical Practice Act: Physicians can delegate responsibilities to a person who is qualified by training, experience, or licensure.

ATTACHMENT E

**POSITION OF
THE STATE MEDICAL BOARD OF OHIO
on
NEEDLE EMG AND NCS**

The State Medical Board of Ohio
Policies and Positions

Statement on Electromyography

July 11, 1990

Revised April 14, 1994

This Policy Statement is made by the State Medical Board of Ohio for the purpose of restating to its licensees their continuing obligations under Sections 4731.22(B) and 4731.34, Ohio Revised Code, as they relate to the practice of electromyography. The Board has stated the same position in previous policy statements.

WHAT IS ELECTROMYOGRAPHY?

Electromyography (EMG) falls into two primary categories: needle electromyography testing and nerve conduction testing. Needle electromyography testing involves insertion of needle electrodes into skeletal muscles and concurrent observation of the electrical activity in those muscles by means of an oscilloscope and a loudspeaker. Nerve conduction testing is performed using the same equipment, but consists of surface stimulation or needle stimulation of peripheral nerves with an evaluation of the motor and/or sensory action potentials produced.

The purpose of both categories of electromyography is to detect abnormalities of the peripheral neuromuscular system or to determine the extent and degree of recovery of neuromuscular abnormalities -- that is, to diagnose.

IS ELECTROMYOGRAPHY THE PRACTICE OF MEDICINE?

Section 4731.34, Ohio Revised Code, defines the practice of medicine in the State of Ohio and provides, in part:

A person shall be regarded as practicing medicine, surgery, podiatry, or midwifery, with the meaning of sections 4731.01 to 4731.60, inclusive of the Revised Code . . . who examines or diagnoses for compensation of any kind, or prescribes, advises, recommends, administers or dispenses for compensation of any kind, direct or indirect, a drug or medicine, appliance or cast, application, operation or treatment, of whatever nature, for the cure or relief of a wound, fracture or bodily injury, infirmity or disease.

Electromyography is an extension of the history and physical examination and must be considered only in the light of the clinical finding. The person performing electromyography must be able to elicit

the pertinent history and perform the necessary examination to define the clinical problems. Differential diagnoses must be considered, and as abnormalities unfold or fail to unfold during the course of testing, the electromyographic procedure may be modified until a probable diagnosis is reached. Results of electromyographic examinations are used for recommending surgical procedures, and for determining the absence of disease with most serious prognoses. In fact, there may exist no better example of an examination or diagnostic procedure fitting within the definition of the practice of medicine in Ohio.

CAN ELECTROMYOGRAPHY BE DELEGATED TO A NONPHYSICIAN?

Though electromyography may appear somewhat similar to electroencephalography (EEG) or electrocardiology (EKG) testing, which involve recording techniques and are routinely delegated to nonphysician technical personnel supervised by specifically trained physicians for later interpretation by those physicians, the electromyographic test procedure itself differs from them as it does not follow any stereotyped pattern.

For example, in assessing a patient with a possible lumbosacral radiculopathy the needle electromyograph consists of examining muscles of the back, pelvic girdle, and lower extremity innervated by the various lumbar and sacral nerve roots; but the specific parameters of the procedure vary greatly from patient to patient. Although there may exist a relatively routine pattern of muscles to be examined, the number of areas to be examined in each of these muscles, the need to examine other muscles, and not infrequently, the need to examine muscles in other areas of the body depend entirely on the patient's history, symptoms, clinical findings at the time of examination, and electric potentials demonstrated as the test proceeds. It is impossible to formulate standard electromyographic test procedures for the nonphysician to carry out.

Needle electromyographic testing also differs from EEG or EKG testing with respect to the mechanisms utilized for the display of test data. Because of the high frequency electrical potentials demonstrated during the electromyographic testing direct writing mechanical devices cannot be used to preserve the results. The primary display mechanism is a cathode ray oscilloscope which must be continuously monitored by the individual doing the procedure. In addition, the sound of the electrical activity displayed on the oscilloscope, as reproduced by the loudspeaker at the same time, can be vitally important. Even if a standard electromyographic test procedure for nonphysicians could be developed and adequate recording devices existed for preservation of the oscilloscope displays and concurrent sounds, it must be remembered that the electrical activity displayed depends on the examiner's actions at a given moment. The exact depth and precise location of the electrode tip must be known in relation to the oscilloscope display and

the loudspeaker's sounds. Simply stated, needle explorations can no more be standardized than the test procedure itself.

Although the surface electrode placement and nerve stimulation in nerve conduction studies may be performed by a nonphysician technician and the results recorded, that individual must be supervised on-site by a specifically trained physician who can interpret the results into a diagnosis. Even nerve conduction studies involve interpretation of factors such as spread of stimulus, volume, conduction of muscle action potentials, and the alteration of neurophysiological phenomena by the patients' pathologic states.

The impossibility of standardizing electromyography, which includes needle explorations and nerve conduction testing, and the need to consider or reach differential diagnosis during testing itself prevent delegation to nonphysicians.

In summary, it is the position of the State Medical Board of Ohio that:

- 1) Electromyography is the practice of medicine under Section 4731.34, Ohio Revised Code.
- 2) The delegation of electromyography to a nonphysician is and always has been a departure from, or failure to conform to, minimal standards of care of similar practitioners under the same or similar circumstances as provided in Section 4731.22(B)(6), Ohio Revised Code, and assisting in or abetting the practice of medicine without a certificate as provided in Section 4731.22(B)(20) and 4731.41, Ohio Revised Code.

approved 7/11/90

revised 4/14/94

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<http://www.state.oh.us/med/positionpapers/emgpaper.htm>
This page updated May 28, 2002

ATTACHMENT F

ALABAMA STATE BOARD OF MEDICAL EXAMINERS

Position on Needle EMG and NCS

Attachment F



ALABAMA STATE BOARD OF MEDICAL EXAMINERS

LARRY D. DIXON, EXECUTIVE DIRECTOR

P.O. BOX 946
MONTGOMERY, ALABAMA 36101-0946
843 WASHINGTON AVE.
MONTGOMERY, ALABAMA 36104

TELEPHONE: (334) 242-4116
E MAIL: lbmedixon@mindspring.com

August 11, 1999

Michael Labanowski, M.D.
Doctor's Building, SAMC
1118 Ross Clark Circle, Suite 704
Dothan, AL 36301-3022

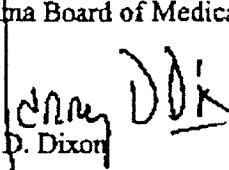
Dear Dr. Labanowski:

This will acknowledge receipt of your letter of July 29, 1999 concerning EMG testing being performed in Alabama by physical therapists. For your information, the State Board of Medical Examiners, in September 1989, adopted a policy on EMG testing that stated that both the performance and interpretation of EMG's should be done by a physician and not a technician, whether in a hospital or office setting. This policy was announced in the Board of Medical Examiners' quarterly newsletter in the Fall of 1990. The Board of Medical Examiners later learned that the Alabama Board of Physical Therapy had issued a declaratory ruling in June of 1989 which stated that EMG/NCV testing is within the scope of the practice of physical therapy in Alabama.

The State Board of Medical Examiners has not modified or withdrawn its 1989 opinion. However, in this state the health professions are regulated by autonomous licensing boards, each with the authority to interpret its own practice act. The State Board of Medical Examiners does not have jurisdiction or authority over the Alabama Board of Physical Therapy. There is no mechanism for resolving the conflicting opinions of the two state regulatory boards, short of litigation. It is my understanding that EMG testing is being taught to physical therapists at the University of Alabama and that neurologists are involved in this training. It is my further understanding that many physicians in this state routinely refer patients to physical therapists for EMG testing. While the Board of Medical Examiners understands that many neurologists in this state feel that EMG testing should only be performed by qualified licensed physicians, this issue is not without controversy, even among physicians.

I hope that you will find this information responsive to your concerns.

Sincerely,
Alabama Board of Medical Examiners


Larry D. Dixon

LDD/mlm

ATTACHMENT G

MEDICAL COLLEGE OF WISCONSIN SURVEY

Attachment G

Timothy R. Dillingham, M.D., M.S.
Professor and Chair

Department of Physical
Medicine and Rehabilitation

October 22, 2003

Shirlyn A. Adkins, J.D.
Executive Director
AAEM/ABEM
421 First Avenue Southwest
Suite 300 E
Rochester, MN 55902

Re: Clarification regarding my research into the scope of Electrodiagnostic Services
in the United States and quality of care for these patients

Dear Shirlyn:

At this time I am writing to clarify for you the findings of my recent investigations regarding provision of Electrodiagnostic Services in the United States. You may disseminate this letter to whomever you consider appropriate. As you know, we examined over 48,000 electrodiagnostic encounters in the United States as reflected in a large national data set. We found that both Neurologists and Physiatrists are by far the most prevalent providers of these services. Non-physician providers, however, account for approximately 16% of these studies. The physical therapists account for 9.3%. This study however, only delineates who is providing services and does not address the quality of care.

In order to address the quality of Electrodiagnostic Services provision, we are now completing a second study using this data. These results were presented in part at the recent AAEM meeting in San Francisco. In this investigation into the accuracy of testing we used diabetic patients as the group to examine. We also utilized an indicator condition, in this case, polyneuropathy, in these patients with Diabetes. We examined the ability of different Electrodiagnostic Services providers to correctly identify polyneuropathy in persons with Diabetes. As you know, Diabetes is of epidemic proportions in the United States. Many persons with Diabetes will go on to develop polyneuropathy and the pain and weakness it brings. It is very important to identify polyneuropathy in this group of patients as failure to do so results in unnecessary surgeries and other interventions, when indeed the correct identification of polyneuropathy can lead to treatments for the pain and disability associated with this condition. Electrodiagnosis is the hallmark of diagnosis for this condition as well.

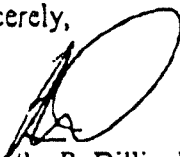
Shirlyn Adkins

Page 2

We found in a sample of over 6,000 diabetic patients that Neurologists and Physiatrists correctly identified 11% of this group as having Polyneuropathy. The Neurologists and Physiatrists were identical in their identification rates. In sharp contrast to this, Physical Therapists identified approximately 2% of their group of diabetic patients as having Diabetic Polyneuropathy despite seeing a similar group of patients. This is one-sixth the identification rate for skilled physicians (Neurologists and Physiatrists) who practice in this area of medicine. This represents substandard care with an inadequate recognition of this disabling condition. In addition, we found that therapists provide limited studies which are insufficient to accurately identify polyneuropathy. Over-calling entrapment neuropathies or radiculopathies and failing to identify Diabetic Polyneuropathy is an error in diagnosis that can have profound effects on patients, namely, unnecessary surgical decompressions or lumbar laminectomies.

Should you require any further information, or wish to discuss the results of these findings, I would be happy to speak with you.

Sincerely,



Timothy R. Dillingham, M.D.
Professor and Chairman
Physical Medicine and Rehabilitation
Medical College of Wisconsin

ATTACHMENT H

CENTERS FOR MEDICARE AND MEDICAID SERVICES

2003 SURVEY ON IMPROPER PAYMENTS

Attachment H



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CMS ANNOUNCES MEDICARE IMPROPER PAYMENTS RATE FOR 2003

The Centers for Medicare & Medicaid Services (CMS) today announced the national Medicare improper payments rate for 2003, based on a new and expanded program for measuring the rate and helping prevent future errors. The error rate for fiscal year 2003 was estimated at 5.8 percent, or \$11.6 billion, when adjusted to reflect a high non-response rate experienced in the first year of the new program. This is about the same as last year's rate as measured by the HHS Office of Inspector General (OIG).

"The annual error rate gives us an estimate of how much billing mistakes cost the American taxpayer, and that number is always too high," said CMS Administrator Tom Scully. "The information we now have available will help us to better understand the problem, better manage the program, and better educate providers and contractors to prevent errors in payment. It also underscores the need for us to modernize Medicare by allowing us to make the contractors more accountable to CMS and the taxpayers."

Since 1996, HHS has annually determined the rate of improper payments for fee-for-service claims paid by Medicare contractors. The survey measures claims found to be medically unnecessary, inadequately documented or improperly coded. From 1996 until last year, the survey was conducted by the OIG based on a survey of some 6,000 claims. In those years, the rate declined from 13.8 percent in 1996 to 6.3 percent in 2001 and 2002.

This year CMS launched the expanded effort, reviewing approximately 128,000 Medicare claims to learn more precisely where errors are being made. The new effort provides CMS with contractor-specific error rates, error rates by provider type and error rates by service type. This information is critical for CMS to better identify where problems exist and target improvement efforts more precisely.

The national error rate helps CMS identify a problem, but does not provide sufficient information for the problem to be solved. For the first time CMS will

have information at a sufficiently detailed level so that problems can be better assessed and corrected. The error rate may now be viewed at a contractor specific and a provider specific level, enhancing CMS's ability to oversee and manage Medicare payments.

CMS initially calculated the Medicare fee-for-service error rate and estimate of improper claim payments using a methodology approved by the OIG. The methodology includes randomly selecting a sample of claims submitted in 2002; requesting medical records from providers who submitted the claims; and reviewing the claims and medical records to see if the claims complied with the Medicare coverage, coding, and billing rules.

However, in this first year of the new program, CMS experienced a significant unexpected increase in the rate of non-responders to the survey. Counting all non-responders as errors, the initial CMS review found an error rate of 9.8 percent. More than half this rate was accountable to non-responders. In order to achieve a more reasonable estimate, CMS adjusted the non-response rate based on OIG's past experience with non-responders and other error categories. CMS' measurement of a 5.8 percent rate is based on OIG's experience-based ratio, with 82 percent of the rate due to errors other than lack of documentation and the remaining 18 percent due to non-responses to request for medical records. To improve the response rate in future years, CMS will make several improvements to its process, such as asking the OIG to send a follow-up letter to providers who don't respond.

"These results tell us that there is still much work to be done to identify and prevent payment errors," said Scully. "Now that CMS has detailed error rates, we can aggressively target our efforts by strengthening the management of our contractors and to concentrate on the problems indicated by the error rate. Our goal is to bring about a dramatic reduction in the Medicare payment errors in the next 24 months."

CMS will take significant steps to further reduce the error rate, using the far more detailed information as a guide. CMS' enhanced management of the Medicare contractors improves the contractors' accountability to CMS and the taxpayers. CMS's efforts will include incorporating the contractor specific error rates into the Contractor Performance Evaluation System, educating health care providers on the proper coding and documentation of medical procedures, and ensuring that Medicare rules are accessible and understandable. CMS will focus on contractors and providers with particularly high error rates.

As shown by the new detail in this year's report, the provider types that had the most errors nationally were chiropractors (11.3 percent), physical therapists (18.2 percent) and internists (13.5 percent). Providers with the lowest errors were ambulance services (4.7 percent), podiatrists (4 percent) and urologists (5.3 percent). The findings also indicate which contractors have a large number of providers that submit improper claims.

CMS is continuing to work with the contractors that pay Medicare claims and the quality improvement organizations on aggressive efforts to lower the error rate, including:

- Improving education and outreach efforts to providers.
- Making it easier for providers to submit documents.
- Making it easier for providers to find Medicare rules by adding a section to the Medicare Coverage Database (www.cms.hhs.gov/med) that contains coverage and coding information.
- Developing a computerized tool that generates state-specific hospital billing reports to help quality improvement organizations analyze administrative claims data.
- Developing projects with the quality improvement organizations addressing state-specific admissions necessity and coding concerns as well as monitoring inpatient payment error trends by error type.
- Ensuring better understanding of the role of the CMS contractor, who estimates the error rates, including its role in requests for medical records and follow-up efforts to make sure providers are complying with those requests.

In addition, CMS has directed the Medicare contractors that pay Medicare claims to develop local efforts to lower the error rate by addressing the cause of the errors, the steps they are taking to fix the problems, and other recommendations that will ultimately lower the error rate.

"Over the past years, HHS and CMS have issued similar reviews on the quality of care provided in nursing homes and home health agencies," said Scully. "This information will provide us with the fundamental structure to hold the fee-for-service contractors accountable for the services they provide as we move to performance-based contracting from simply paying contractors to process Medicare claims."

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ATTACHMENT I

CALIFORNIA INSURERS BULLETIN

ON

REIMBURSEMENTS FOR NEEDLE EMG AND NCS

Correction: Replacement Procedure Codes 49650 and 47562

Medicare Bulletin 99-8 incorrectly listed procedure code 59650 as the replacement code for newly deleted 56316. The correct procedure code to be used in place of 56316 is 49650, laparoscopy, surgical; repair initial inguinal hernia.

Additionally, page 42 of Medicare Bulletin 99-8 incorrectly listed procedure code 57562 as the replacement code for newly deleted 56340. The correct procedure code to be used in place of 56340 is 47562, laparoscopy, surgical; cholecystectomy.

Clarification—NCS and EMG Testing

NHIC is clarifying two local medical review policies on NCS and EMG testing published in *Medicare Bulletin* 98-7 (December 1998), pp37-47, and pp47-59, respectively. In the Indications and Limitations of Coverage and/or Medical Necessity section(s) of these policies, we stated that NCS and EMG testing may be *personally performed by a physical therapist who is certified by the American Board of Physical Therapy Specialties as a qualified electrophysiologic clinical specialist, AND who is permitted to provide the service under California State law.*

This clarification addresses which portion of the NCS and EMG tests Medicare will cover for these qualified physical therapists. HCFA defines the professional component of a diagnostic test as a physician interpretation and report of the results of the tests that will lead to the treatment of the condition of the patient. The interpretation of the findings requires an understanding of the potential disease states, relevant clinical issues, and comparative data (when available). NCS and EMG interpretations typically include development of a differential diagnosis and/or a final diagnosis. Based on a physician's level of knowledge of disease and their clinical electrophysiologic manifestations, only a physician may interpret such results properly. Interpretation of electrophysiologic findings and integration with other clinical data is a diagnostic service.

State law prohibits qualified physical therapists from developing diagnostic or prognostic interpretations of the data obtained. Therefore, physical therapists are **not permitted to bill Medicare for the professional component of these tests**, even when they are certified by the American Board of Physical Therapy Specialties as a qualified electrophysiologic clinical specialist. Qualified physical therapists are allowed by State law to report the findings of the data obtained from the testing. Medicare considers a report of the findings to be part of the technical component of these tests, and Medicare will continue to pay qualified physical therapists for this service as explained in the previously published NCS and EMG policies.

Medicare will continue to deny payment of the professional component billed for these services by PTs, with the message that although this is a service that is a benefit of the program (a covered service), it is not payable to this particular provider.

References:

- California Business and Professions Codes Sections 2620-2622
- California Code of Regulations, Title 16, Division 13.2 Physical Therapy Regulations
- HCFA regulations and relevant correspondence
- Correspondence and articles from various interested parties.

THIS BULLETIN MUST BE SHARED WITH ALL HEALTH CARE PRACTITIONERS AND MANAGERIAL MEMBERS OF THE

ATTACHMENT J

RISING COST OF PHYSICAL THERAPY IN MICHIGAN

Cook, Mark

Attachment J

From: Pomante, Michele
Sent: Tuesday, June 03, 2003 10:22 AM
To: Cook, Mark
Cc: Cook, Timothy P.; Pendell, Cami
Subject: Physical Therapy Payments

Hi Mark - Total payout for physical therapy services has increased by almost \$14M over the past five years. The following are the total payout figures for physical therapy services that were reported in annual reports filed with the commissioner:

1997 - \$25,737,015
1998 - \$29,122,194
1999 - \$32,800,873
2000 - \$40,843,933
2001 - \$49,054,821

(Please note, these figures do not include payout for FEP or BCN.)

Hope this is what you needed. However, if there's any other information you need, please let myself or Tim know.

Michele

ATTACHMENT K

CAPSULES / ANECDOTES

**Examples of poor quality patient care as a result of
non-physician electromyography (EMG):**

A gentleman sought a second opinion for arm and neck pain. He had been given a diagnosis of an ulnar neuropathy at the elbow by EMG/NCV. My EMG/NCV found multi-level cervical radiculopathy confirmed by MRI and a bilateral ulnar "neuropathy" at the elbow that was actually related to an anatomical variant position of the ulnar nerve, found by searching the elbow area in a gentleman with an odd carrying angle.

I saw a patient this week for a chief complaint of right arm weakness. He had previously had an EMG by a chiropractor, which demonstrated signs of active denervation in all right upper extremity muscles tested, from distal to proximal (deltoid). The chiropractor's interpretation was that the person had ulnar and median neuropathies. No other limbs were examined. The patient was sent to an orthopedic surgeon and had carpal tunnel and ulnar transposition surgery on that arm.

The EMG I performed shows signs of widespread active denervation. The exam and EMG are compatible with ALS.

While in practice in Ohio in the late 1990's, one of my thoracic surgeons asked me to evaluate a patient the day prior to a thymectomy for a diagnosis of myasthenia gravis.

The patient was a young lady in her early 20's with intermittent episodes of ptosis and weakness. She carried the presumptive diagnosis of myasthenia gravis. The referring neurologist did not perform NCS/EMG due to a physical impairment. The patient's NCS had been performed by a physical therapist. After garnering a history from this patient, several features caused me to doubt the diagnosis of myasthenia gravis:

1. the ptosis and weakness were always unilateral
2. no history of diplopia and no exam findings of extraocular movement abnormalities during attacks
3. the patient was antibody negative despite generalized weakness
4. finally, in the nerve conduction portion of an electrodiagnostic study, the repetitive stimulation studies done at 3 hertz were interpreted by the physical therapist as a 40% decrement. My review of the waveforms revealed the patient actually had a 40% **increment**.

Obviously, the operative procedure was immediately cancelled.

This patient, upon the inaccurate interpretation of the repetitive stimulation study by a physical therapist, would have undergone a major operative procedure for absolutely no reason at all (let alone the questions about the efficacy of thymectomy in patients who truly do have myasthenia gravis) without my fortuitous intervention.

I saw this male patient for one to two years. I had done an EMG on his upper extremities less than one year before. The question was diabetic neuropathy versus cervical radiculopathy. Based on the EMG he had radiculopathy and was scheduled for surgery. He began having problems with lower extremities. The technician, who did not print out data and did a needle exam, diagnosed diabetic peripheral neuropathy. He has a lumbar herniated disc.



AMERICAN ASSOCIATION OF ELECTRODIAGNOSTIC MEDICINE

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February 20, 2004

Ken Cole
GCSI
530 West Ionia Street
Lansing, MI 48933

FEB 25

Dear Ken:

Per your request, the American Association of Electrodiagnostic Medicine (AAEM) has compiled some background information regarding nonphysicians performing needle electromyography. In this packet are reports with physician explanations of problems and papers written by physicians. I hope that you find this information useful. In order to assist in your review of the materials, I am providing a breakdown as seen below.

Breakdown:

1. Patient was seen in California and had electrodiagnostic studies performed by a physical therapist (PT). The PT found, "that the amplitudes were normal and recruitment in every muscle tested was normal and full for the lower extremities." PT suggested complete studies of the right and left upper extremities to rule out "a possible proximal compromise." Physician performed new studies based on clinical evidence and determined the patient had ALS or Lou Gehrig's disease.
2. A PT performed EMG studies that later resulted in unnecessary surgery.
3. PT performed EMG stated carpal tunnel syndrome, physician later repeated the study and found no evidence of carpal.
4. PT performed excessive needle electromyography studies on a patient and determined the patient had ulnar neuropathy and mild carpal tunnel. Physician performed fewer studies PT and ruled out ulnar neuropathy and mild carpal tunnel.
5. PT performed needle electromyography and surgery was performed based on the diagnosis.
6. Studies done by PTs outlined clearly by physician reviewing PT reports and pointing out problems.
7. Studies performed by a PT providing a medical diagnosis of carpal tunnel.
8. Studies performed by a PT problems are outlined by the physician reviewing the reports.
9. Studies performed in Iowa by a PT. The physician noted several inconsistencies and diagnoses that may have been made in error. A letter attached to the study points out problems.
10. Nerve conduction studies performed by a non-physician diagnosing a radiculopathy without needle electromyography. Radiculopathies can not be diagnosed purely by nerve conduction studies. A physician performed a complete evaluation and determined no radiculopathy.
11. Article regarding the importance of electrodiagnostic studies.
12. Copy of 1 full paper and 3 abstracts emphasizing the diagnostic aspect of EMG and also that the referral diagnosis is often wrong.

I will put out another email to my committees requesting additional information on nonphysician needle electromyography. Hopefully, some or all of this information will help sway the opinion of the legislators or regulators.

Sincerely,

Tiffany Schmidt, JD
Director of Policy

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ATTACHMENT L

EXCERPT FROM PALAZZO v. MAPM&R and MNA

Attachment L

STATE OF MICHIGAN
IN THE CIRCUIT COURT FOR THE COUNTY OF WAYNE

JOHN J. PALAZZO,

Plaintiff,

v.

THEODORE M. COLE, M.D.;
THE MICHIGAN ACADEMY OF PHYSICAL
MEDICINE AND REHABILITATION,
a non-profit corporation;
DR. ROBERT L. JOYNT, M.D.;
DR. ROBERT D. TEASDALL, M.D.;
and THE MICHIGAN NEUROLOGICAL
ASSOCIATION, jointly & severally,

No: 86-616526-NZ

HON. SUSAN D. BORMAN

Defendants.

JULIUS DENENBERG (P 12668)
JOSEPH S. SANO (P 36603)
Denenberg, Tuffley, Bocan,
Jamieson, Black, Hopkins & Ewald,
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JEFFREY J. ENDEAN (P 25285) ⁹⁸⁹ 799-8692
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JAMES H. HUGHESIAN (P 31765) 313-965-7900
Attorney for Robert D. Teasdall, M.D.
and Michigan Neurological Assoc.

AFFIDAVIT OF JOHN PALAZZO

STATE OF MICHIGAN)

)SS.

COUNTY OF OAKLAND)

John Palazzo, being first duly sworn, deposes and

DENENBERG, TUFFEY, BOCAN, JAMIESON, BLACK, HOPKINS & EWALD, P.C.

In the present case, the injunction sought by Plaintiff is simple. It does not prohibit the Defendants from moving for legislative reform in the area of EMG testing. Nor does it restrict valid exercises of the peer review function. The injunction merely prohibits the Defendants from taking actions relative to the performance of EMG testing by physical therapists in general, and Plaintiff, John J. Palazzo, d/b/a Neurometrics in particular: "in a manner which violates MCL 445.772 (anti-trust), MCL 445.901 (consumer protection), or which constitutes a tortious interference with Plaintiff's advantageous business relations." Lawful acts are not prohibited, unlawful acts are prohibited. Can the Defendants seriously argue that an injunction restraining them from unlawful acts is inequitable with regard to their interest? Can the Defendants seriously argue that the public interest is served by permitting Defendants to accomplish unlawful acts?

This form of the injunction is necessary to preserve Defendants' legitimate interests. Defendants, of course, have free speech rights, and ethical duties with regard to their profession. It is beyond citation that speech which constitutes illegal conduct is not protected by the First Amendment. In addition, Plaintiff's ethical duties end where maliciousness, and anti-competitive behavior begins. By framing the injunction in this manner, both the Defendants'

